

## TABLE OF CONTENTS

#### 21A582BH 21B582BH

#### **GETTING STARTED**

Introduction
Safety1
Description of Controls
Setting Up Guide

#### How to use the On Screen Display

Main Controls Window
Brightness
Contrast
Degauss

#### SCREEN SIZE & POSITION WINDOW

Rotary Default
Moire
Vertical Linearity
Corner Correction
GEOMETRY CONTROLS WINDOW
Pincushion
Balanced Pincushion
Trapezoid
Parallelogram
Rotation
EXIT & RESET

#### **Additional Information**

Advanced Controls Window

BNC & USB Set Ups	. 16
Power Saving Feature	. 17
Pin Assignment	
Specifications	. 18
ndex	. 18
Glossary	. 18
Froubleshooting	. 19
Narranty (Appendix)	. 60

#### **OTHER LANGUAGE VERSIONS**

French (Francais)	Spanish (Español)

#### Appendix

English	Information for Users in the U.S
-	Declaration FCC A2
	ENERGY DECLARATION
	TCO'95 A5-A6
Deutsch	Hinweis / GS / ACHTUNG
Français	Declaration FCC A8

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### Introduction

The Philips Brilliance 201P/201B color monitor displays sharp and brilliant images of text and graphics with a maximum resolution of 1800x1440(201P),1800x1350(201B) pixels. It is optimal for Windows, CAD / CAM / CAE, desktop publishing, spread sheets, multi-media, and any other application that demands a large screen size and high resolutions.

The monitor automatically scans horizontal frequencies from 30KHz to 115KHz(201P),107KHz(201B), and vertical frequencies from 50Hz to 160Hz. With microprocessor-based digital-controlled circuitry and On-Screen Display (OSD) controls, the monitor can automatically adjust itself to the video card's scanning frequency and displays an image with the precise parameters you desire.

## **Features**

• An anti-glare, anti-static, and anti-reflection high-contrast screen coating eliminates any bad effects caused by room light reflecting on and dust attracted to the screen's surface.

• With the Color Adjustment feature, you can easily choose different preset color temperatures or set your own customized color parameters.

• The Image Tilt Adjustment feature corrects a rotated image. This correction minimizes the distortions caused by elements such as the Earth's magnetic field.

• The full-size feature expands the image on the monitor to fill the screen when used in factory preset modes.

• USB Bay at back of monitor is prepared for the Universal Serial Bus hub. You can easily and flexibly connect USBdesigned devices – such as a mouse or keyboard – to the monitor for true Plug-and-Play function. USB hub sold separately (optional).

• Green Design – including automatic power saving function (NUTEK) and low-emission compliance

(TCO '95) – shows your commitment to the environment.

• DDC1/DDC2B allows communication between the monitor and the PC for optimal video configuration.

 New CrystalClear technology for sharpnest high brightness and high contrast

• Moire Cancellation eliminates diffraction, a fringe pattern in the picture.

**Note:** Your monitor operates according to the VESA DDC level 1/2B. Only computers that support the same guidelines and operate at the same or a higher level can make use of this feature. If your computer does not support the relevant guidelines, you can still use your monitor and computer. However, you may need to manually specify the appropriate resolution in the computer.

As an Energy Star Partner, PHILIPS has determined that this product meets the Energy Star guidelines for energy efficiency.

#### Contact us at our web site: http://www.monitors.be.philips.com

#### Safety precautions and maintenance

• Unplug the monitor, if you are not going to use it for an extended period of time.

• Unplug the monitor, if you need to clean it with a slightly damp cloth. Wiping the screen with a dry cloth is okay when the power is off. However, never use alcohol or ammonia-based liquids.

• Consult a service technician if the monitor does not operate normally when following the instructions in this manual.

• The back cover should be removed only by qualified service personnel.

• Keep the monitor out of direct sunlight and away from stoves or any other heat source.

• The top of the monitor is not a shelf. Remove any object that could fall into the vents or prevent proper cooling of the monitor's electronics.

- Keep the monitor dry. To avoid electric shock, do not expose it to rain or excessive moisture.
- Keep the monitor away from magnetic objects, such as speakers, electric motors, transformers, etc.

• When positioning the monitor, make sure the power plug and outlet are easily accessible.

## **End-of-life disposal**

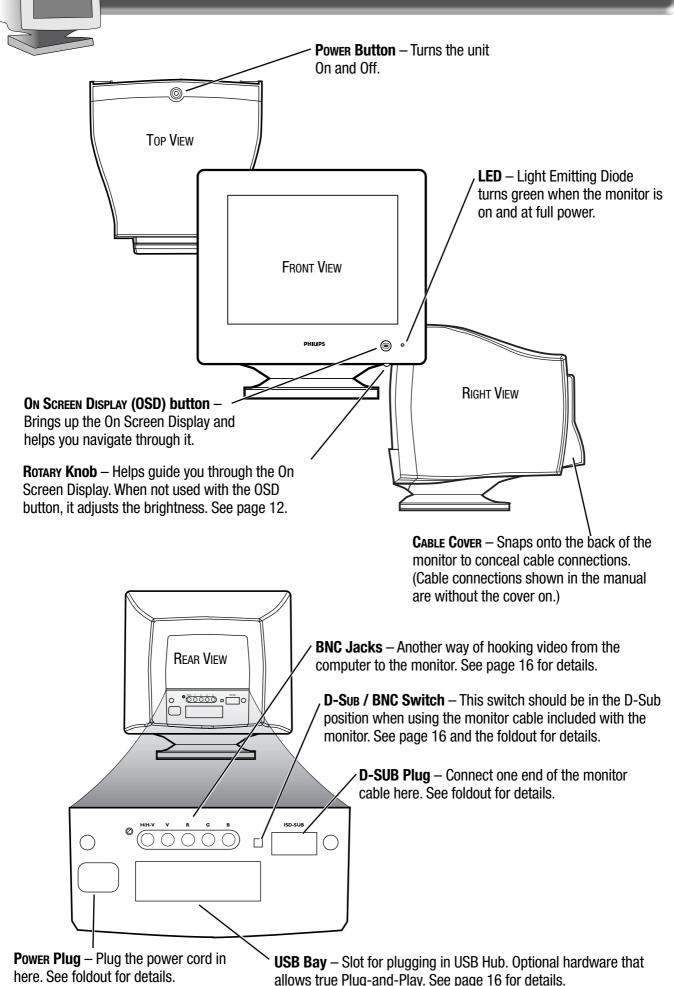
Your new monitor contains materials that can be recycled and reused. Specialized companies can recycle your product to increase the amount of reusable materials and to minimize the amount to be disposed of.

Please find out about the local regulations on how to dispose of your old monitor.

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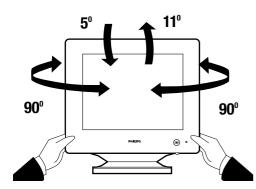
## DESCRIPTION OF CONTROLS



2

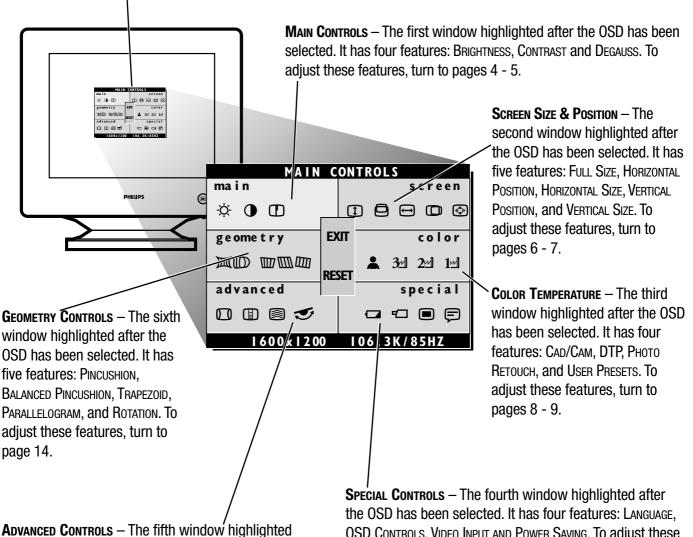
#### Description of Controls

PEDESTAL



PEDESTAL – With the built-in pedestal. you can tilt and swivel the monitor to the most comfortable viewing angle. To best use your monitor, always place it at eye level.

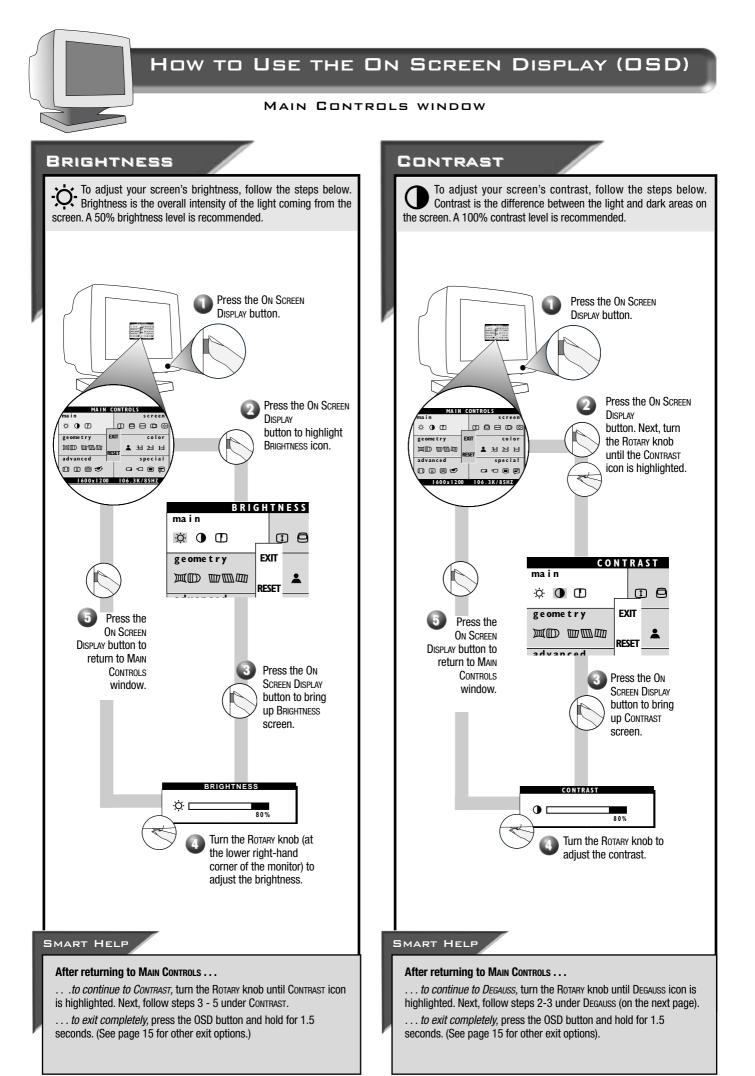
**ON SCREEN DISPLAY** – Your monitor is preset at the factory. However, you can adjust it using the ON SCREEN DISPLAY button and the ROTARY knob described on page 2. The way to do so is through the On Screen Display (OSD). Below is a brief description of the six On Screen Display windows.



after the OSD has been selected. It has four features: CORNER CORRECTION, VERTICAL LINEARTY, MOIRE, and ROTARY DEFAULT. To adjust these features, turn to page 12.

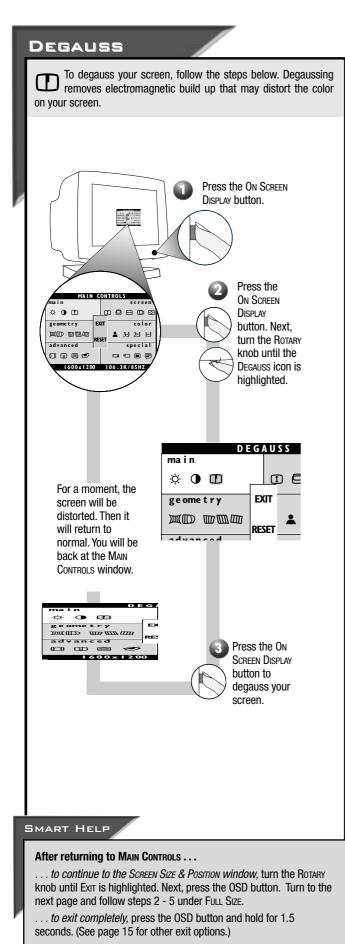
OSD CONTROLS, VIDEO INPUT AND POWER SAVING. To adjust these features, turn to pages 10 - 11.

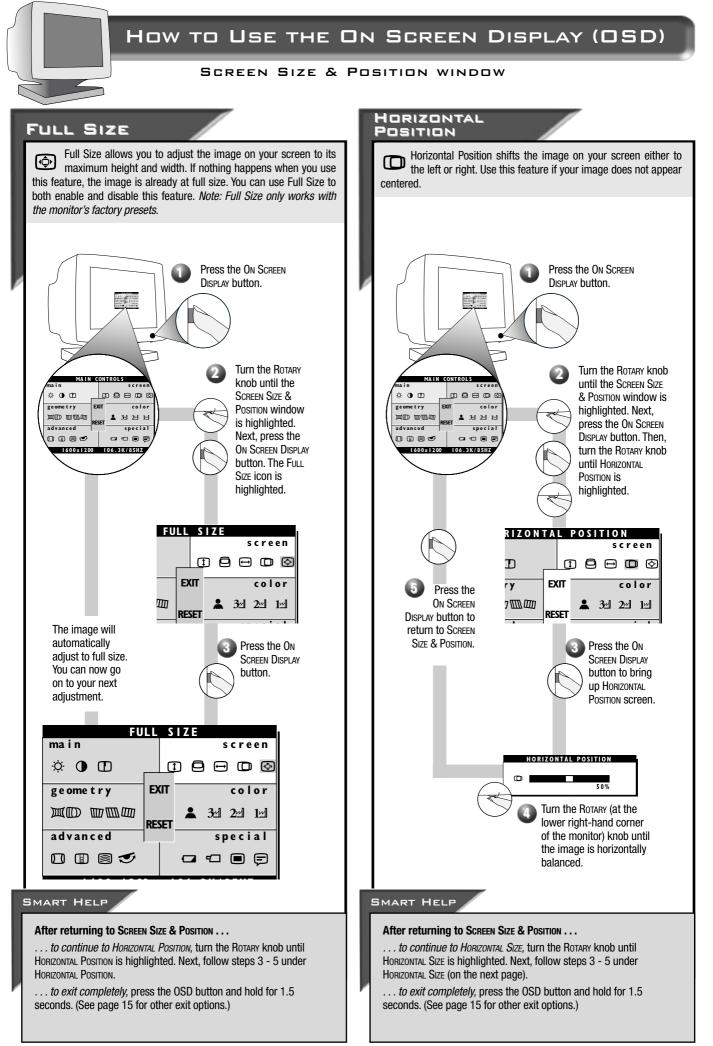
Note: Language allows you to change the On Screen Display from English to French, Spanish, German, or Italian. See page 10 for details.



## How TO USE THE ON SCREEN DISPLAY (OSD)

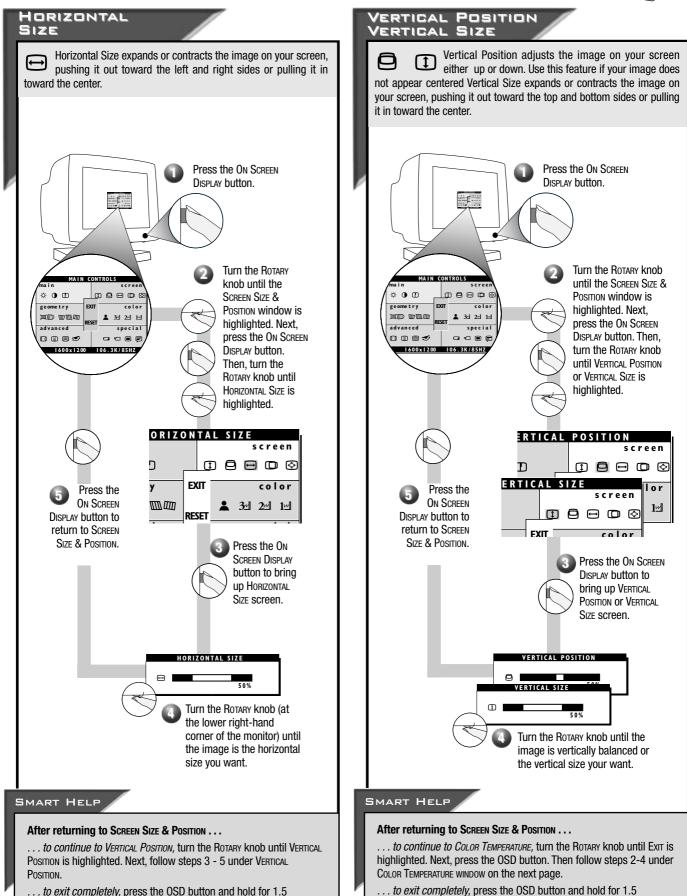
#### MAIN CONTROLS WINDOW





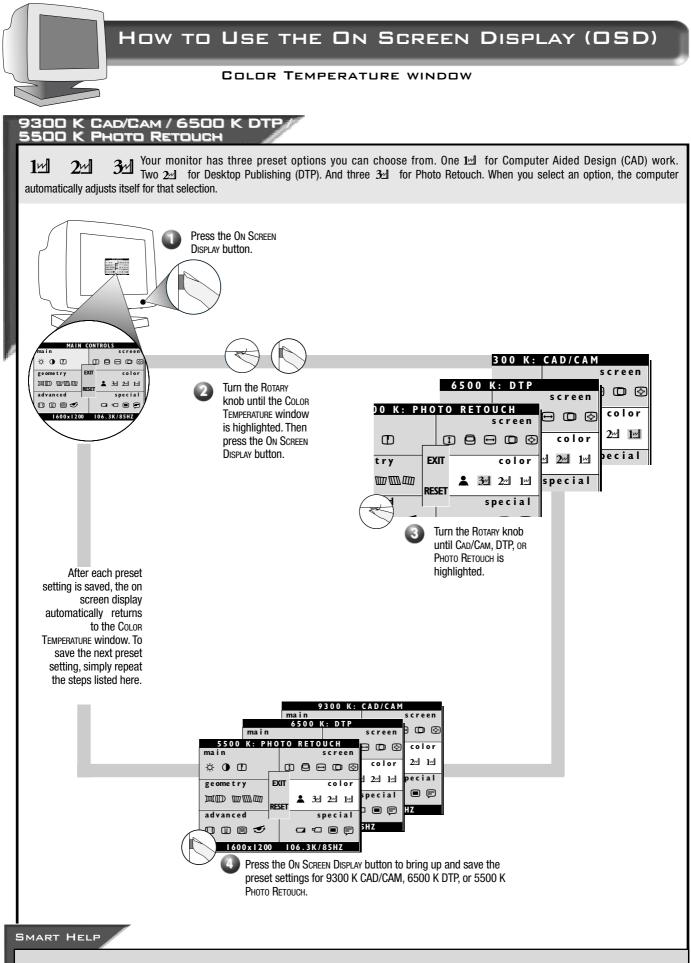
#### SCREEN SIZE & POSITION WINDOW





... to exit completely, press the OSD button and hold for 1.5 seconds. (See page 15 for other exit options.)

seconds. (See page 15 for other exit options.)



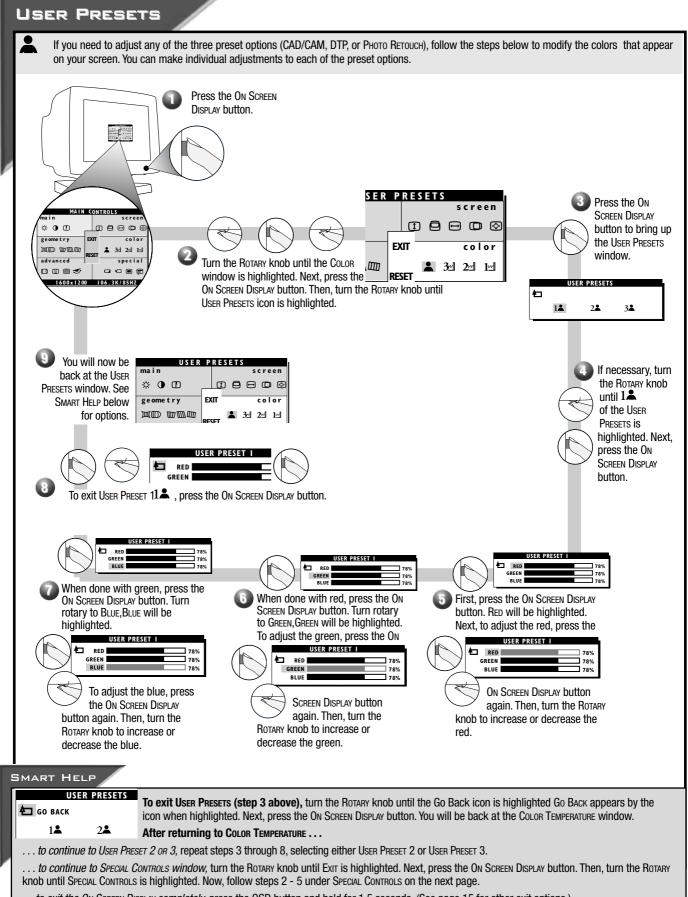
#### After returning to COLOR TEMPERATURE ...

- ... to continue to User Presets, turn the ROTARY knob until User Presets is highlighted. Next, follow steps 3 9 under User Presets on the next page.
- ... to exit completely, press the OSD button and hold for 1.5 seconds. (See page 15 for other exit options.)

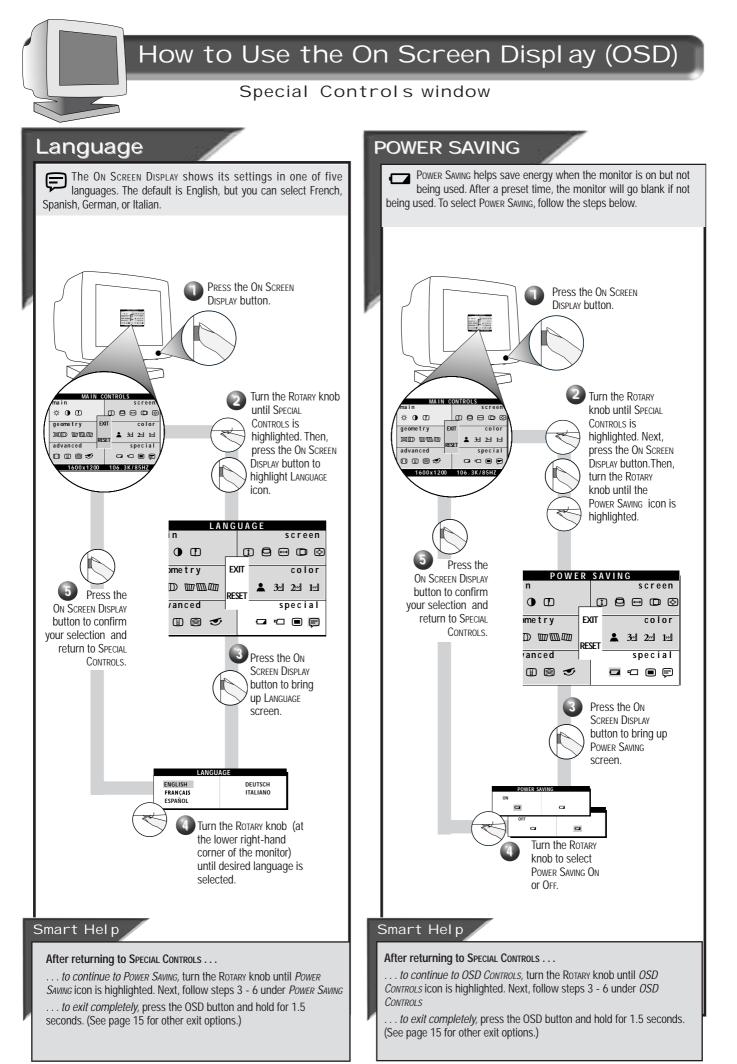
## How TO USE THE ON SCREEN DISPLAY (OSD)

#### COLOR TEMPERATURE WINDOW





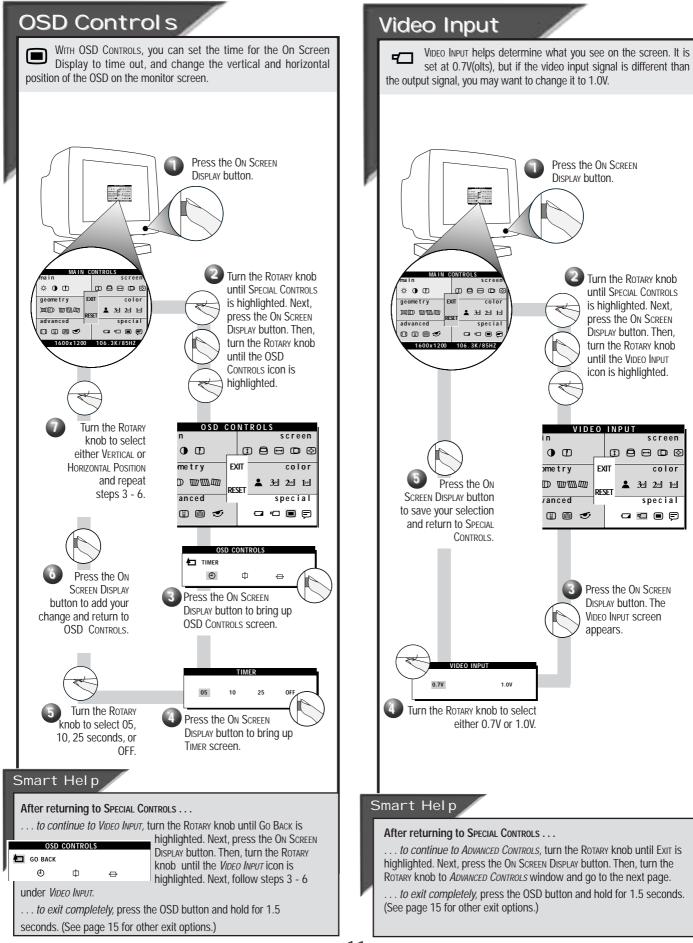
... to exit the ON SCREEN DISPLAY completely, press the OSD button and hold for 1.5 seconds. (See page 15 for other exit options.)



# How to Use the On Screen Display (OSD)

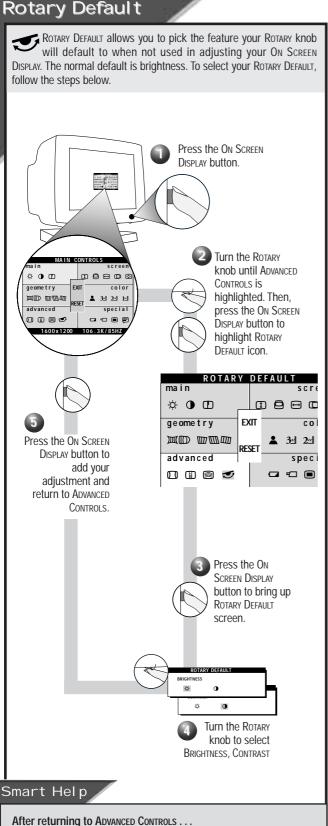
## Special Controls window





# How to Use the On Screen Display (OSD) ADVANCED Controls window

## Rotary Default



. to continue to Moire, turn the Rotary knob until Moire is highlighted. Next, follow steps 3 - 5 under Moire.

... to exit completely, press the OSD button and hold for 1.5 seconds. (See page 15 for other exit options.)

moire Moire is a fringe pattern arising from the interference between two superimposed line patterns. To adjust your Moire, follow the steps below. Note: Use only if necessary. By activating Moire, sharpness can be affected. Press the ON SCREEN DISPLAY button. 80 860 A N.M Turn the Rotary knob until Advanced ö O D CONTROLS IS geometry EXIT color highlighted. Next, id ida ▲ 3년 2년 1년 press the ON SCREEN RESET advanced special DISPLAY button. Then, 0085 turn the ROTARY 500x1200 106.3K/85H7 knob until the MOIRE icon is highlighted. Press the ON SCREEN MOIRE DISPLAY button to add ö 🛈 🖸 your adjustment and to bring up Advanced geometry FXIT CONTROLS SCREEN. ▲ 3⊴ RESET See Smart Help to select advanced s p Vertical Moire or turn 0000 MOIRE OFF. Press the ON SCREEN DISPLAY button to bring up Moire screen. OFF 5 Turn the ROTARY knob to Turn the Rotary knob adjust the moire. until Horizontal Moire is highlighted. Then, press the ON SCREEN DISPLAY button.

### Smart Help

...to select Vertical Moire or to turn Moire off, follow the steps above, selecting Vertical Moire or moire off in step 4. After returning to Advanced Controls ...

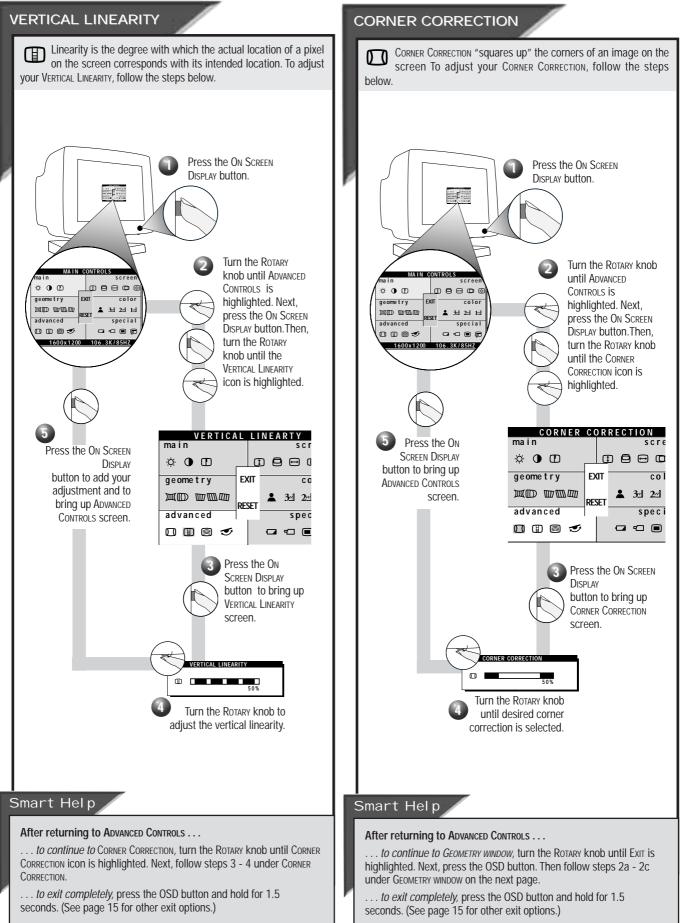
. to continue to Vertical Linearity, turn the Rotary knob until Vertical LINEARITY icon is highlighted. Next, follow steps 4 - 5 under VERTICAL LINEARITY (on the next page).

... to exit completely, press the OSD button and hold for 1.5 seconds. (See page 15 for other exit options.)

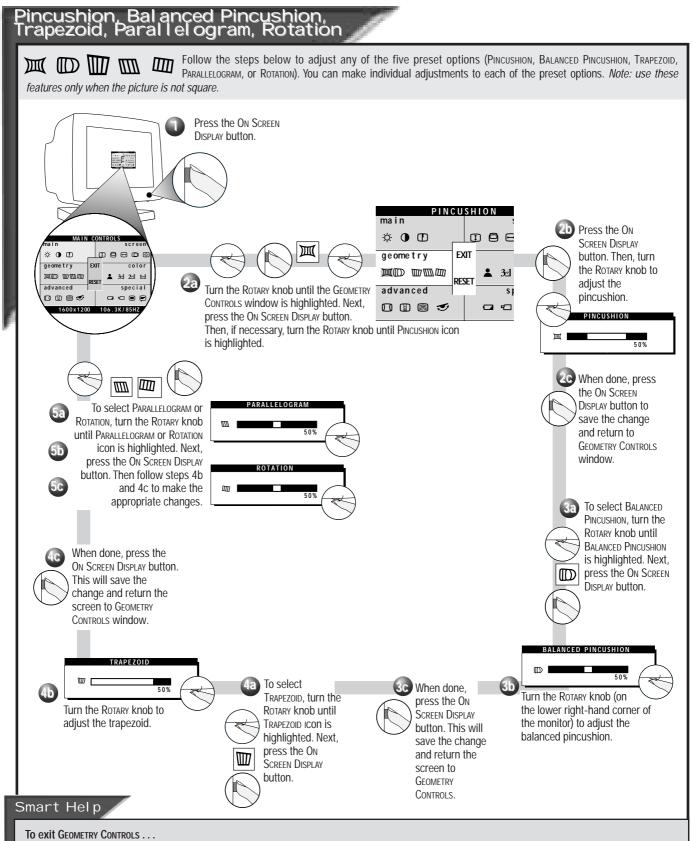
# How to Use the On Screen Display (OSD)

## ADVANCED Controls window





## Geometry Controls window



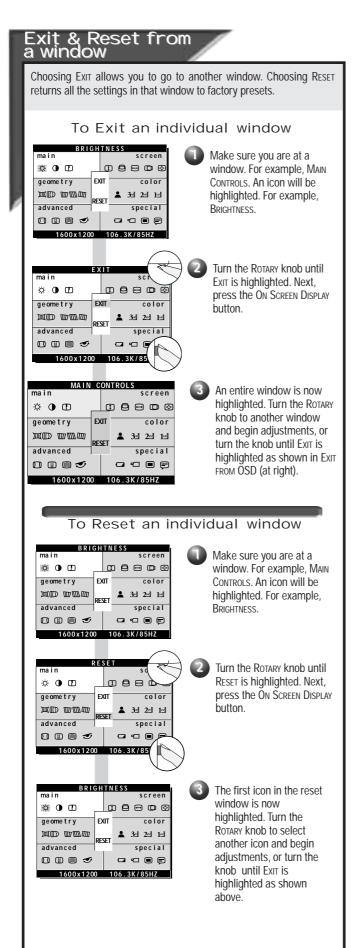
... but continue to another window, turn the Rotary knob until Exit is highlighted. Next, press the ON Screen Display button. Then, turn the Rotary knob until that window is highlighted. Now, press the ON Screen Display button and follow the instructions for that window.

- ... completely, press the ON Screen Display button and hold for 1.5 seconds. The On Screen Display will disappear. All changes will be saved.
- To make changes to one item, follow the steps for that item. Then, follow "To exit Geometry Controls ....."

To return to factory presets, see "To Reset an Individual Window" on page 15.

Exit and Reset





#### <u>Exit\_& Reset from the</u> creen Display

Exiting from the On Screen Display removes the On Screen Display from the monitor screen. Resetting from the On Screen Display returns everything in all the windows to factory presets.

#### To Exit an entire On Screen Display

	CONTROLS
main	screen
¢ O D	
geometry	EXIT color
MO HOH	8 <b>▲</b> 3년 2년 1년
advanced	special
	<i>у</i> а а е е
1600x12	200 106.3K/85HZ
	$\frown$
EX	
main	scr
× • •	
geometry	EXIT color
	RESET 3d 2d 1d
advanced	special

main

Make sure you have exited from all icons in a window. (See To Exit FROM AN INDIVIDUAL WINDOW.) For example, Main Controls will be highlighted.

Turn the ROTARY knob until EXIT is highlighted. Next, press the ON Screen Display button. The On Screen Display will disappear.

#### 1600x1200 106.3K/85F Reset Entire On Screen Display MAIN CONTROLS Make sure you have exited ö 🛈 🖸 from all icons in a window. (See To EXIT FROM AN geometry EXIT color RESET 3 2 2 10 INDIVIDUAL WINDOW.) For example, Main Controls advanced special 0000 will be highlighted. 1600x1200 106.3K/85HZ RESET ALL SETTINGS Turn the ROTARY knob until RESET is highlighted. Next, ö O D press the ON SCREEN DISPLAY geometry EXIT color button. ▲ 3년 2년 1년 RESET special advanced 0 0 0 🕬 🍼 1600x1200 106.3K/85 Turn the ROTARY knob to RESET ALL SETTINGS select No or YES. Then NO YES press the On Screen Display RESET ALL SETTINGS button. YES MAIN CONTROLS screen If No is selected, the On Screen Display appears ά O Π and MAIN CONTROLS is qeometry EXIT color EXIT OSD highlighted. ma i n screen † O 🖸 If YES is selected, the EXIT EXIT qeometry color

OSD screen appears.

M

adv

070

ΠΠ 🗐 🝼

advanced

▲ 3년 2년 1년

special

RESET

1600x1200 106.3K/85HZ

# Additional Hook Up Options

#### BNC and USB Set Ups

#### BNC Connections

BNC is another way to connect the monitor to the computer. This connection requires an optional BNC cable. It can be connected to either a Macintosh- or IBM-compatible computer. For those who work with graphics or designs, this option may be better.

Note: Be sure to flip the D-Sub/BNC switch to BNC when using this connection.

#### For an IBM-compatible computer:

1. Turn off the computer.

2. Connect the (optional) BNC monitor cable and set D-SuB/BNC switch to BNC.

3. Connect the shielded power cable.

4. Turn on the monitor. Then turn on the computer.

5. If you have Windows '95, follow the "If you have Windows '95" steps on the Setting Up foldout sheet.

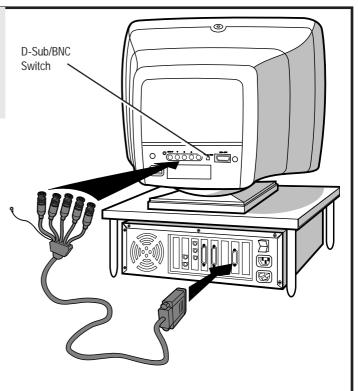
#### For a Macintosh-type computer:

1. Connect the Mac adapter to one end of the monitor cable.

2. Turn off the computer.

**3.** Connect the (optional) BNC monitor cable and set D-SuB/BNC switch to BNC.

- 4. Connect the shielded power cable.
- 5. Turn on the monitor. Then turn on the computer.



Refer to the "Setting Up your Philips monitor" foldout for a more detailed guide to setting up your monitor.

#### USB Connections

USB (Universal Serial Bus) is an innovation in connecting your IBM-compatible computer to your monitor. By using the USB, you will be able to connect your keyboard, mouse, printer, and other peripherals to your monitor instead of having to connect them to your computer. This will give you greater flexibility in setting up your system. Plus, you will have true plug-and-play capability. While the software is still being developed, Philips has included the hardware so you will be ready to take advantage of this next generation in computer development.

#### For an IBM-compatible Computer:

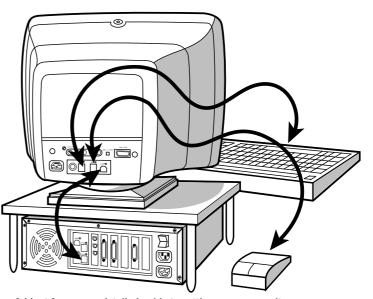
1. Turn off the computer.

2. Connect the (optional) USB Hub and cable to the computer and to the monitor. (Computer must have USB port.)

- 3. Connect the shielded power cable.
- 4. Turn on the monitor. Then turn on the computer.

**5.** With the installation of the correct software, you will be able to connect specially-made peripherals to the monitor.

Note: USB Hub and cables sold separately. USB Bay exists in back of monitor.



Refer to the "Setting Up your Philips monitor" foldout for a more detailed guide to setting up your monitor.

# Additional information

### Power saving feature



# Automatic Power Savings & Preset Resolution Modes

11

If you have VESA's DPMS compliance display card or software installed in your PC, the monitor can automatically reduce its power consumption when not in use. If input from a keyboard, mouse, or other device is detected, the monitor automatically "wakes up." The table directly below shows the power consumption and signalling of this automatic power-saving feature. To turn this feature on and off, see page 10. The tables at the bottom of the page show the 13/14 factory preset resolution modes. This leaves room for additions.

energy

Po	wer	Management	Definition

VESA's mode	Video	H-sync	V-sync	Power	Power	LED
				used	saving(%)	color
ON	Active	Yes	Yes	< 160W	0%	Green
Stand-by	Blanked	No	Yes	< 15W	87.5%	Yellow
Suspend	Blanked	Yes	No	< 15W	87.5%	Yellow
OFF	Blanked	No	No	< 5W	95.8%	Amber

This monitor is Energy Star compliant and power management compatible.

AS AN ENERGY STAR PARTNER, PHILIPS HAS DETERMINED THAT THIS PRODUCT MEETS THE ENERGY STAR GUIDELINES FOR ENERGY EFFICIENCY.

The proper operation of the function requires a computer with VESA DPMS power management capabilities. When used with a computer equipped with VESA DPMS, the monitor is Energy Star compliant.

## 201B

	Factory Preset Resolution Modes					
Mode	RESOLUTION	Н. Freq. (Кнz)	V. Freq. (Hz)	Standard		
1	640 x 400	31.5	70	VGA		
2	640 x 480	31.5	60	VGA		
3	640 x 480	37.5	75	VESA/75		
4	800 x 600	46.9	75	VESA/75		
5	800 x 600	53.7	85	VESA/85		
6	1024 x 768	60	75	VESA/75		
7	1024 x 768	68.7	85	VESA/85		
8	1152 x 870	69.0	75	MAC		
9	1152 x 900	71.8	76	SUN SPARC		
10	1280 x 1024	80.0	75	VESA/75		
11	1280 x 1024	91.1	85	VESA/85		
12	1600 x 1200	106.3	85	VESA/85		
13	1800 x 1350	105.5	75			

## 201P

Factory Preset Resolution Modes					
Mode	RESOLUTION	H. Freq. (Khz)	V. Freq. (Hz)	Standard	
1	640 x 400	31.5	70	VGA	
2	640 x 480	31.5	60	VGA	
3	640 x 480	37.5	75	VESA/75	
4	800 x 600	46.9	75	VESA/75	
5	800 x 600	53.7	85	VESA/85	
6	1024 x 768	60	75	VESA/75	
7	1024 x 768	68.7	85	VESA/85	
8	1152 x 870	69.0	75	MAC	
9	1152 x 900	71.8	76	SUN SPARC	
10	1280 x 1024	80.0	75	VESA/75	
11	1280 x 1024	91.1	85	VESA/85	
12	1600 x 1200	106.3	85	VESA/85	
13	1800 x 1350	105.5	75		
14	1600 x 1200	112.5	90		

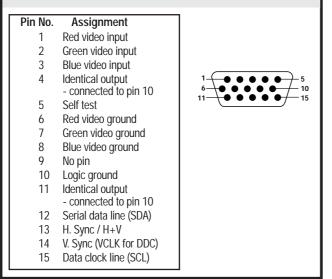
Unit is capable of up to 1800 x 1440 with user definable modes. 201P/201B Monitors are compliant with VESA standard timing requirements.

# Additional Information

#### Coming to Terms with this Book

## Pin Assignment

The 15-pin D-sub connector (male) of the signal cable:



## Index

Automatic Power Saving17	Power bu
Balanced Pincushion14	Power pl
BNC jacks2	Power Sa
BNC set up	Reset
Brightness4	Resolutio
Cable Cover	Rotary De
CAD/CAM	Rotary kr
Color Temperature3, 8-9	Rotation
Contrast	Safety pr
Corner Correction	Screen S
Degauss	Special C
Description of controls 2, 3	Specifica
D-Sub/BNC switch 2, 16	Trapezoio
DTP	Troublest
End-of -life disposal	nounco
Exit	USB hub
Features1	USB set u
Full Size	User Pres
Geometry Controls 3, 14	Vertical L
	Vertical L
Glossary	Vertical P
Hook Ups Set Up Guide, 16	
Horizontal Position	Video Inp
Horizontal Size7	Warranty
Language	
Main Controls	
Maintenance1	
Moire	
Monitor cable plug2	
On Screen Display2	
OSD button2	
OSD Controls	
Parallelogram	
Pedestal	
Photo Retouch	
Pin Assignment	
Pincushion	

## Specifications

#### GENERAL

CRT Screen size Viewable Image Size (VIS) Focusing method Dot pitch Phosphor

Screen treatment Display area Factory preset Maximum usable Scanning frequency Horizontal (line)

Vertical (frame) Input power Power consumption Thermal dissipation

Input signal Video Sync

#### Pedestal Tilt

Swivel Physical Unit dimension (WxHxD)

Net weight

Operating conditions Temperature

Humidity

Storage conditions Temperature

Humidity

:21" (53.3 cm) flat & square :19.9" :Dynamic focus :0.22 mm (horizontal) :P22 or equivalent, medium short persistence :ARASC

:380 mm (H) x 285 mm (V) :406 mm (H) x 304 mm (V)

:30-115kHz(201P) (AutoScan) 30-107kHz(201B) (AutoScan) :50-160 Hz (AutoScan) :100-240 V AC, 50-60 Hz :110 Watt normal, 160 Watt max. :(201B) 375.4 BTU normal, 511.9 BTU maximum :(201P) 375.4 BTU normal, 546.1 BTU maximum

:0.7 or 1.0 Vpp, 75 Ohm impedance :Separate sync. TTL level Composite sync. TTL level

:5° forward, 11° backward :90° left, 90° right

:490 x 529 x 551 mm 19.3" x 21.7" x 20.8" :31.5 kg 69.3 lbs.

:0° C - 40° C 32° F - 104° F :10% - 90%

:-40° C - 60° C -20° F - -140° F :5% - 95%

#### <u>Glossary</u>

Here are a few definitions that may help you.

- The process by which metal parts of the monitor are Degauss demagnetized in order to reduce screen distortion and color impurity. D-Sub/ Two ways of connecting your monitor to your BNC computer. Your monitor comes with a D-Sub cable. For work with a heavy emphasis on graphics, a BNC cable is recommended. Geometry A set of controls that allows you to adjust the alignment of the picture on the monitor screen. The goal is to "square up" the picture. This is done by adjusting such items as balanced pincushion, pincushion, parallelogram, rotation, and trapezoid. A fringe pattern caused by the interference between Moire two superimposed line patterns.
  - USB Universal Serial Bus. A way to connect your computer, monitor, and peripherals for true Plug-and-Play functions.

# Additional Information

## What to Do if Something isn't Working



## Troubleshooting

Having trouble? Something not working? Before calling for help, try these suggestions.	
Having this problem? Check these items	
No Picture (Power LED not lit)	Make sure the Power cable is plugged in the wall and back of the monitor. Power button on top of the monitor should be in the ON position. Disconnect the monitor from the power outlet for about one minute.
No Picture (Power LED is Amber or Yellow in color)	Make sure the computer is turned on. Make sure the D-Sub/BNC switch on the rear of the monitor is in the correct position. See pages 2 and 16. Make sure the monitor cable is properly connected to your computer. Check to see if the monitor cable has bent pins. The Energy Saving Feature may be activated. See pages 12 and 17 for more detail.
No Picture (Power LED is Green in color)	Make the Brightness and Contrast controls are set correctly. See page 4 for details Make sure the D-Sub/BNC switch on the rear of the monitor is in the correct position. See pages 2 and 16. Make sure the monitor cable is properly connected to your computer. Check to see if the monitor cable has bent pins. Make sure the computer Power button is on. Unplug the monitor from the power outlet for about 3 minutes.
Screen says	Make sure the D-Sub/BNC switch on the rear of the monitor is in the correct position. See pages 2 and 16. Make sure the monitor cable is properly connected to your computer. See Setting Up foldout. Check to see if the monitor cable has bent pins. Make sure the computer is turned on
when you turn on the monitor.	
No Color	If you are using a non-VESA-DDC standard video card, consult your local Philips dealer or service organization to obtain an adapter.
Color appears blotchy	The picture may need degaussing. See page 5 for details. Remove any nearby magnetic objects. Face the monitor East for best picture quality.
Missing one or more colors	Check user settings of Color Temperature. See pages 8 and 9 for details. Make sure the monitor cable is properly connected to your computer. Check to see if the monitor cable has bent pins.
Dim Picture	Adjust the Brightness and Contrast controls. See page 4 for details. Check the Video Input selection and switch from 0.7 volts to 1.0 volts or 1.0 volts to 0.7 volts. See page 11. Check your video card and the manual instructions for it. It may be a non-VESA-DDC Standard card.
Picture is too large or too small	Adjust the Horizontal and/or Vertical Size. See pages 7 and 8 for details.
Edges of the picture are not square	The geometry controls require adjusting. See page 14 for details.
Picture has a double image	Eliminate the use of a video extension cable and/or video switch box. Face the monitor East for best picture quality.
Picture is not sharp	Check to make sure Moire is switched off. See page 12.
Unstable Picture	Increase your refresh rate. Consult your computer manual for details.
Windows '95 cannot find your video card	Select "Super VGA" under Standard DISPLAY TYPES, or contact your video card manufacturer for the right drivers.